

1 What is claimed is:

2 1. A computer system adapted to play an audio CD, said computer system comprising:

3 a computer subsystem comprising a system CPU, a digital-audio generating circuit, a
4 digital computer bus coupling said CPU and said digital-audio generator circuit, and a digital
5 computer bus controller; and

6 a CD audio subsystem comprising an audio device capable of playing an audio CD and
7 coupled to said digital computer bus controller, an audio amplifier circuit coupled to said audio
8 device, and an audio interface coupled to said digital computer bus in parallel to said digital
9 computer bus controller;

10 said audio interface being adapted to generate signals to operate said audio device and
11 play said audio CD when power is not being supplied to said computer subsystem.

12 2. A system as claimed in claim 1, wherein said audio interface comprises output control
13 logic selectively coupling said audio interface to said digital computer bus.

14 3. A system as claimed in claim 2, wherein said output control logic generates commands
15 and/or data to said digital computer bus.

16 4. A system as claimed in claim 2, wherein said output control logic receives commands
17 and/or data from said audio device.

18 5. A system as claimed in claim 1, wherein said audio interface is isolated from said digital
19 computer bus when power is being supplied to said computer subsystem.

20 6. A system as claimed in claim 1, wherein said digital computer bus is an IDE bus.

21 7. A system as claimed in claim 1, wherein said audio device is selected from the group
22 consisting of CD-ROM drive, DVD drive, hard drive, removable IDE media device, and fixed
23 IDE media device.

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1 8. A system as claimed in claim 1, further comprising one more interface switches for
2 human control of said audio device, said switches electrically coupled to said audio interface and
3 generating signals to said audio interface and causing said audio interface to generate control
4 signals for operation of said audio device.

5 9. A system as claimed in claim 1, further comprising a display coupled to said audio
6 interface for displaying the track number of said CD.

7 10. A system as claimed in claim 8, wherein said interface switches comprise buttons
8 accessibly mounted on said computer system and coupled to said audio interface so as to permit
9 human control over said audio device.

10 11. A system as claimed in claim 8, wherein activation of one of said interface switches,
11 when power is not being supplied to said computer subsystem, generates a signal to said audio
12 interface thereby activating said audio interface.

13 12. A system as claimed in claim 10, wherein said buttons include functionality selected
14 from the group of one or more of play, fast-forward, rewind, next track, previous track, pause
15 and stop.

16 13. A system as claimed in claim 1, wherein a 5 Volt power rail is supplied to said digital
17 computer bus controller when electrostatic discharge diode protection is employed in said digital
18 computer bus controller.

19 14. A system as claimed in claim 13, further comprising a power switch adapted to deliver
20 said 5 Volt power rail to said digital computer bus controller.

21 15. A system as claimed in claim 14, wherein said power switch further turns one or more of
22 the components selected from the group of: said audio device, said audio interface, and one or
23 more portions of said CD audio subsystem.

1 16. A system as claimed in claim 1, wherein said audio interface is integrated directly into a
2 bus bridge, wherein said bus bridge comprises said digital computer bus controller.

3 17. A computer system adapted to play an audio CD, said computer system comprising:
4 a computer subsystem comprising a system CPU, a digital-audio generating circuit, a
5 digital computer bus coupling said CPU and said digital-audio generator circuit, and a digital
6 computer bus controller; and

7 a CD audio subsystem comprising an audio device capable of playing an audio CD and
8 coupled to said digital computer bus controller, an audio amplifier circuit coupled to said audio
9 device, and an audio interface coupled to said digital computer bus in parallel to said digital
10 computer bus controller;

11 said audio interface being adapted to generate signals to operate said audio device and
12 play said audio CD when power is not being supplied to said CPU.

13 18. A method for playing an audio CD in a computer system, said method comprising:
14 deenergizing a computer CPU; and
15 controlling, using an audio interface circuit coupled to a digital computer bus in parallel
16 to a digital computer bus controller, an audio device and a computer audio amplifier to play an
17 audio CD without supplying energy to said CPU.

18 19. A method as claimed in claim 18, further comprising providing controlling the operation
19 of said audio device using at least one interface switch.

20 20. A method as claimed in claim 18, further comprising generating commands and/or data
21 to said digital computer bus.

22 21. A method as claimed in claim 18, further comprising receiving commands and/or data
23 from said audio device.

1 29. A bus controller as claimed in claim 27, wherein said output control logic receives
2 commands and/or data from said audio device.

3 30. A bus controller as claimed in claim 27, wherein said IC is isolated from said at least one
4 of said data buses when power is being supplied to said CPU.

5 31. A bus controller as claimed in claim 26, wherein said at least one of said data buses is an
6 IDE bus.

7 32. A bus controller as claimed in claim 26, wherein said audio device is selected from the
8 group consisting of CD-ROM drive, DVD drive, hard drive, removable IDE media device, and
9 fixed IDE media device.

10 33. A bus controller as claimed in claim 26, said IC adapted to receive signals from one more
11 interface switches for human control of said audio device, said switches electrically coupled to
12 said IC and generating signals to said IC and causing said IC to generate control signals for
13 operation of said audio device.

14 34. A bus controller as claimed in claim 26, said IC adapted to transmit to a display coupled
15 to said IC the track number of said CD.

16 35. A bus controller as claimed in claim 33, wherein said IC is capable of being activated by
17 activation of one of said interface switches, when power is not being supplied to a CPU coupled
18 to said at least one of said data buses.